



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,397	10/20/2003	Peter Miguel Martino	200313513-1	3757

22879 7590 04/15/2005

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

PRENTY, MARK V

ART UNIT	PAPER NUMBER
----------	--------------

2822

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,397

Applicant(s)

MARTINO, PETER MIGUEL

Examiner

MARK V. PRENTY

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8,10,16 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-7,9 and 11-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2822

This Office Action is in response to the amendment filed on March 28, 2005.

Claims 1, 8, 10, 16 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by newly cited United States Patent 6,750,551 to Frutschy et al. (Frutschy).

With respect to independent claim 1, Frutschy discloses a semiconductor assembly (see the entire patent, including the Fig. 1 disclosure), comprising: a semiconductor package 102/104/122 comprising a substrate 104, a die 102 positioned on the substrate, and a lid 122 positioned on the die; a receiver 132 sized to receive said semiconductor package; a clamp 148, said clamp engaging the lid of said semiconductor package and said receiver, said clamp applying a clamping force to the lid of said semiconductor package to hold said semiconductor package to said receiver; and a spring member 158 having a clamp contact portion contacting said clamp and a substrate contact portion contacting the substrate of said semiconductor package, said spring member transferring a portion of the clamping force from the lid of said semiconductor package to the substrate of said semiconductor package (see column 4, lines 39-43).

Claim 1 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Frutschy.

With respect to dependent claim 8, Frutschy's clamp 148 comprises a heat sink (see column 4, line 11).

Claim 8 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Frutschy.

With respect to independent claim 10, Frutschy discloses a spring member 158 (see the entire patent, including the Fig. 1 disclosure) comprising a clamp contact portion and a substrate contact portion, said spring member being positionable between

Art Unit: 2822

a clamp 148 and a substrate 104 of a semiconductor package, so that said spring member transfers to the substrate of the semiconductor package a portion of a clamping force applied by the clamp to a lid 122 of the semiconductor package (see column 4, lines 39-43).

Claim 10 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Frutschy.

With respect to independent claim 16, Frutschy discloses an improved semiconductor mounting system (see the entire patent, including the Fig. 1 disclosure) of the type in which a clamp 148 applies a clamping force to a lid 122 of a semiconductor package 102/104/122 to hold the semiconductor package to a semiconductor package receiver 132, wherein the improvement comprises a biasing member 158 positioned between the clamp and a substrate 104 of the semiconductor package, said biasing member transferring a portion of the clamping force from the lid of the semiconductor package to the substrate of the semiconductor package (see col. 4, lines 39-43).

Claim 16 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Frutschy.

With respect to independent claim 20, Frutschy discloses a semiconductor assembly (see the entire patent, including the Fig. 1 disclosure), comprising: a semiconductor package 102/104/122 having a lid 122 and a substrate 104; semiconductor package receiver means 132 for receiving said semiconductor package; clamp means 148 operatively associated with said semiconductor package and said

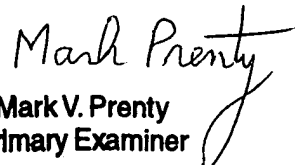
Art Unit: 2822

semiconductor package receiver means for applying a clamping force to the lid of said semiconductor package to hold said semiconductor package to said semiconductor package receiver means; and biasing means 158 positioned between said clamp means and the substrate of said semiconductor package for transferring a portion of the clamping force from the lid of said semiconductor package to the substrate of said semiconductor package (see column 4, lines 39-43).

Claim 20 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Frutschy.

Claims 2-7, 9 and 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable over the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Registered practitioners can telephone the examiner at (571) 272-1843. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (571) 272-2800.


Mark V. Prenty
Primary Examiner